

Testimony of

Geoff Smith  
Project Director  
Woodstock Institute

Before the  
Subcommittee on Housing and Community Opportunity  
And  
Subcommittee on Financial Institutions and Consumer Credit

U.S. House of Representatives

Regarding  
Subprime Lending: Defining the Market and its Customers

Tuesday, March 30, 2004

Thank you for the invitation to testify at this hearing. My name is Geoff Smith, and I am Project Director at the Woodstock Institute. Woodstock Institute is a 30-year old, Chicago-based non-profit organization that works locally and nationally to promote reinvestment and economic development in lower-income and minority communities. Woodstock has been extremely active in the area of predatory lending conducting research that illustrates the scope and impact of the predatory lending problem and working to develop local, state and federal policy that addresses this problem. My testimony today will focus on the findings of a research report recently released by Woodstock Institute, working with Dan Immergluck, that attempts to quantify the relationship between skyrocketing neighborhood foreclosures and increased levels of subprime lending in preceding years.<sup>1</sup> The results indicate that subprime lending was a dominant force in the increased and highly concentrated levels of neighborhood foreclosures of recent years.

## **Introduction**

The policy debates about subprime and predatory mortgage lending have often focused on the abuses suffered by individual borrowers, on the one hand, and on the possible “unintended consequences” of increasing regulation of the subprime industry on the other. In considering policy in this area, participants in the policy process should be clear on the benefits and costs of different regulatory alternatives. The debate tends to hinge on protecting individual borrowers while not overly restricting the availability of credit. Often lost in this debate are the spillover costs presented by high-risk lending, what economists call “negative externalities.” These are costs borne by neither the lender nor the borrower but by parties “external” to the mortgage transaction. While borrowers certainly bear a good deal of the costs of foreclosures, in modest-income communities entire neighborhoods are harmed by foreclosures. They easily lead to boarded-up homes, abandonment and blight. The spatially concentrated increase of foreclosures that arise due to higher levels of subprime lending has an important economic and social spillover cost that should be a more central concern of policy making in this area.

While individual community development practitioners can point to anecdotal evidence of the link between subprime lending and increased foreclosures in their neighborhoods, and a few studies have documented an apparent relationship between subprime lending and foreclosures, our study goes considerably further. We developed a multivariate estimation of neighborhood foreclosure levels that allows us to develop a precise quantitative measure that relates subprime lending at the neighborhood level to neighborhood foreclosures. Understanding the magnitude of this relationship should allow policy-makers to give it the appropriate level of attention in considering the impacts of regulation and legislation of high cost lending.

## **Policy Concerns About Subprime Lending**

There are at least three somewhat interrelated reasons why community reinvestment advocates and policy-makers have expressed serious concerns about the explosion of subprime lending that has occurred since the early 1990s. First, because the market for home loans is extremely segmented by race, with minority neighborhoods served excessively by subprime lenders, homeowners in minority communities may be effectively steered toward higher-cost products. If minority communities are targets of higher-cost lenders and receive little attention from prime lenders, the odds of minority borrowers with good credit receiving higher-cost loans will be higher than that of white borrowers with good credit. A second concern – and a subject of a large part of recent policy debates – has to do with the rise of abusive or predatory practices that have been associated with the subprime industry. A third reason policy-makers

---

<sup>1</sup> The full text of the report, *Risky Business – An Econometric Analysis of the Relationship Between Subprime Lending and Neighborhood Forelosures*, can be found at the Woodstock Institute web site [www.woodstockinst.org](http://www.woodstockinst.org).

are concerned about hypersegmented refinance markets is that the growth of subprime lending has been associated with a simultaneous rise in foreclosures. Moreover, the spatial concentration of subprime lending appears to have led to a concentration of subprime foreclosures in minority and modest-income neighborhoods, which in turn can have a devastating impact on their stability and development prospects.

### **The Pricing Issue**

Various sources of data indicate that a substantial portion of subprime loans are priced in excess of what is merited by the risk involved. A study using an industry survey of mortgages with subprime pricing found that almost 29 percent of subprime-priced loans had credit scores above 640, generally considered the point at which prime lenders become quite comfortable with loans.<sup>2</sup> In examining 15,000 subprime mortgages originated by four financial institutions, Freddie Mac found that between 10 and 35 percent of borrowers who obtained mortgages in the subprime market could have qualified for a conventional loan.<sup>3</sup> Freddie Mac also estimated that subprime borrowers who would have qualified for conventional loans paid mortgage rates on the order of one to two-and-one-half percentage points higher than they would have paid in the prime market. However, this does not take into account the higher up-front fees on most subprime loans. It is often up front fees, even more than excessive interest rates, that tend to be the source of a good deal of overcharging.

A study of home purchase loans conducted by an affiliate of the Mortgage Bankers Association found that the probability of a home purchase borrower receiving a subprime loan, controlling for credit history, location and other variables, increased by approximately one-third, from 0.8 percent to 2.5 percent, if the borrower was black.<sup>4</sup> The loan sample in this study had relatively few subprime loans in it, but the increase was relatively substantial and statistically significant.

In an analysis of subprime lending in Chicago and Philadelphia, Calem, Gillen, and Wachter found that, after controlling for education, credit score, income, and housing stock characteristics, black neighborhoods still had much higher levels of subprime lending than white neighborhoods.<sup>5</sup> For refinance loans, an all-black neighborhood was expected to have a subprime share that was twenty-four percentage points higher than an otherwise equivalent white neighborhood, even after controlling for the credit history of neighborhood residents. A larger study of ten metropolitan areas found similar results.<sup>6</sup> Even after controlling for housing turnover, age of housing stock, median income, percent of residents aged 65 and older, and the percent of residents with high risk credit scores, the percentage of residents who were black was a consistently strong determinant of subprime lending activity.

---

<sup>2</sup> Phillips-Patrick, Eric Hirschhorn, Jonathon Jones, and John LaRocca. 2000. What About Subprime Mortgages? *Mortgage Market Trends* 4, no. 1 (June). Washington, D.C.: Office of Thrift Supervision Research and Analysis.

<sup>3</sup> Freddie Mac. 1996. *Automated Underwriting: Making Mortgage Lending Simpler and Fairer for America's Families*. Washington, D.C.: Freddie Mac. September.

<sup>4</sup> Pennington-Cross, Anthony, Anthony Yezer, and Joseph Nichols. *Credit Risk and Mortgage Lending: Who Uses Subprime and Why?* Washington, D.C.: Research Institute for Housing America, Working Paper 00-03.

<sup>5</sup> Calem, Paul, Kevin Gillen, and Susan Wachter. 2002. "The Neighborhood Distribution of Subprime Mortgage Lending." Unpublished manuscript. October.

<sup>6</sup> National Community Reinvestment Coalition. 2003 *The Broken Credit System: Discrimination and Unequal Access to Affordable Loans by Race and Age*. Washington, D.C.: National Community Reinvestment Coalition.

This dual market, caused in part by the aversion of many prime lenders to marketing and making loans in minority communities, can create a sense of futility among minority homeowners in considering banks and other prime lenders as potential sources of mortgage credit. Moreover, even among borrowers who do have impaired credit, the subprime market does not appear to be functioning in a way that serves the interests of borrowers. In Fannie Mae's 2001 National Housing Survey, only 34 percent of credit-impaired respondents were confident that they got the lowest cost mortgage available, compared to 68 percent of all homeowners surveyed.<sup>7</sup> Thirty-two percent of credit-impaired homeowners, compared to ten percent of other all respondents, did not care whether they got the lowest cost mortgage. They were "just happy to be approved." Moreover, more subprime than prime respondents reported not knowing anything about their credit rating.

### **Predatory Practices beyond Excessive Pricing**

Many major subprime lenders have been implicated in at least some instances of abusive lending. One former Chicago legal aid attorney recalled that, when looking at a list of the top 14 subprime refinance lenders in black Chicago neighborhoods, he noticed that his agency had identified specific cases of predatory lending involving each of them.<sup>8</sup> A variety of loan terms and lending practices have been described as predatory or abusive, especially when employed in high-cost or subprime loans. Some of these practices, particularly loan terms such as prepayment penalties, are used in the prime market often without any detriment to the borrower. However, the use of such terms and practices in the subprime market is largely inappropriate. For example, debt-to-income ratios above 40-45 percent may be appropriate in some cases in the prime market, especially for borrowers with high incomes. A 50 percent debt-to-income ratio leaves 50 percent of income available for nonmortgage expenses, which is generally sufficient for high-income households, although perhaps still not an optimal situation. For most households with credit history issues, however, stretching the debt capacity to this degree is not considered responsible lending. Another example is a short-term (e.g., five-year) balloon loan in which payments may be reduced in the near term but then a very large payment comes due at the five-year maturity. A balloon payment for someone who can be expected to obtain refinancing rather easily in the foreseeable future may be appropriate. But for most subprime borrowers, using a balloon payment to lower monthly payments to the point of "affordability" will leave a balloon or escalating principal that the borrower will have great difficulty repaying.

An instance of predatory lending could involve just one predatory practice. More commonly, though, a number of practices occur simultaneously. Moreover, high-pressure or "push" marketing may be most effectively employed when targeting homeowners in vulnerable situations, including those with high levels of health-related or credit card debt. Those not in immediate financial distress are less susceptible to pressure tactics and are more likely to "shop around" for better alternatives.

The proportion of loans made by subprime lenders that contains abusive practices is the subject of some debate, but it is rare to find a case of a predatory lending that does not involve a subprime lender. Some evidence suggests that the proportion of subprime loans with at least one problematic feature may be quite large.<sup>9</sup> For example, estimates of the number of subprime loans containing prepayment penalties range

---

<sup>7</sup> Fannie Mae. 2001. *2001 National Housing Survey*. Washington, D.C.: Fannie Mae.

<sup>8</sup> Rheingold, Ira, Michael Fitzpatrick, and Al Hofeld, Jr.. 2001. "From Redlining to Reverse Redlining: A History of Obstacles for Minority Homeownership in America." *Clearinghouse Review*. 34 no. 9/10 (January/February): 642-654.

<sup>9</sup> Ernst, Keith, John Farris, and Eric Stein. 2002. "North Carolina's Subprime Home Loan Market and Predatory Lending Reform." Durham: Center for Responsible Lending. August.

from 43 percent to 80 percent, while estimates of the share of prime loans containing prepayment penalties are much lower—between 2 and 11 percent.<sup>10</sup>

A couple of recent studies have surveyed recipients of subprime loans to understand the incidence of various predatory lending practices. In a study of 255 very high-costs loans in Dayton, Ohio, 75 percent were found to have prepayment penalties and 24 percent had balloon payments.<sup>11</sup> The researchers also interviewed subprime borrowers who were in the process of foreclosure as well as those who were not. Thirty nine percent of respondents in foreclosure and thirty three percent of respondents not in foreclosure stated that the initial contact with the lender was initiated by the lender via phone or mail. Forty-five percent of foreclosure respondents and 24 percent of other respondents said that their loans' terms at closing were different than what had been discussed. Eighty-six percent of foreclosure respondents and 68 percent of nonforeclosure respondents who noted a difference in terms accepted the difference, perhaps due to pressure at the closing from the lender. And finally, 19 percent of nonforeclosure respondents and 42 percent of foreclosure respondents were encouraged to borrow more than they had intended. In California, researchers interviewed 125 subprime borrowers and found that 39 percent of subprime respondents said that the idea to take out a home-secured loan came from the lender-broker.<sup>12</sup> They also found that 64 percent of respondents had refinanced their homes six times. Forty percent of the refinances had taken place within two years of the prior loan, a strong indicator of the predatory practice known as flipping. The researchers found that 38 percent of the subprime borrowers fit a “worst case scenario” characterized by a combination of onerous loan terms, high costs, and aggressive sales tactics.

### **Subprime Loans and Foreclosure**

One of the reasons that subprime lending has been the subject of a good deal of advocacy and policy-making in recent years has to do with the problem of increased foreclosures. Foreclosures, especially in low- and moderate-income neighborhoods turn what might be typically viewed as a consumer protection problem, in which an individual homeowner is overcharged or even loses her home, into a community development problem, in which increased foreclosures lead to property abandonment and blight. In Chicago, for example, some of the most effective organizing and advocacy for state regulatory action on the predatory lending issue came from groups like Neighborhood Housing Services and the Southwest Organizing Project, which saw that increased foreclosures were threatening more than two decades of work in revitalizing and stabilizing their communities.

Defaults and, especially foreclosures, can entail significant costs and hardships not just for the families most directly affected, but also for surrounding neighborhoods and even the larger communities. McCarthy, Van Zandt, and Rohe describe how foreclosures can involve losing not only accumulated home equity and the costs associated with acquiring the home, but access to stable, descent housing.<sup>13</sup> Moreover, foreclosures damage credit ratings, hurting the owners' prospects not only in credit markets but

---

<sup>10</sup>Fannie Mae. 2001. *2001 National Housing Survey*. Washington, D.C.: Fannie Mae; U.S. Department of Housing and Urban Development. 2000. *Unequal Burden in Baltimore: Income and Racial Disparities in Subprime Lending*. Washington, D.C.: U.S. Department of Housing and Urban Development

<sup>11</sup> Stock, Richard D. 2001. “Predation in the Subprime Lending Market: Montgomery County, Dayton, Ohio: Center for Business and Economic Research, University of Dayton. Project 1097. October.

<sup>12</sup> Stein, Kevin, and Margaret Libby. 2001. *Stolen Wealth: Inequities in California's Subprime Mortgage Market*. San Francisco: California Reinvestment Committee. November.

<sup>13</sup> McCarthy, George, Shannon Van Zandt, and William Rohe. 2001. *The Economic Benefits and Costs of Homeownership: A Critical Assessment of the Research*. Washington, D.C.: Research Institute for Housing America. Working Paper 01-02. May.

also in labor and insurance markets and in the market for rental housing. Moreno estimated average losses to the foreclosed family at \$7,200.<sup>14</sup> Cities, counties and school districts lose tax revenue from abandoned homes. In addition to the direct costs in dealing with abandoned properties and the public safety costs associated with them, there are potential spillovers on the property values and tax receipts from nearby properties. These spillover effects can be significant. Simons, Quercia, and Maric estimated that average sales prices fell \$788 for each 1 percent increase in tax delinquencies in a one- to two-block area of a residence.<sup>15</sup> For FHA foreclosures, Moreno (1995) estimated average city expenses of \$27,000 and neighborhood expenses of \$10,000. Moreover, these figures do not account for all of the social and psychic costs of foreclosures, either to the family or the community.

Subprime loans lead to delinquency and foreclosure at relatively high rates, especially among the higher-risk segment of the industry. A late 1990s industry survey of 27 larger subprime lenders indicated that 90 day delinquency rates for C- and D-grade refinance loans were 10 percent and 22 percent, respectively, compared to a rate of 0.25 percent for prime refinance.<sup>16</sup> Even FHA loans, which have been persistently tied to foreclosure and blight problems in minority communities, had 90-day delinquency rates of less than 2 percent for refinance loans over the same period. The foreclosure rate for all subprime loans in this sample (including the 55 percent that were A- grade) was more than four times the FHA rate. The foreclosure rate for C and D loans is expected to be much higher. In this voluntary survey, almost 20 percent of subprime loans were C and D grade. However, the source of these data appears to be biased towards substantially underrepresenting higher-risk loans. Even more concerning is the fact that problems among subprime loans worsened considerably beginning in 2000.<sup>17</sup> Rates of serious delinquency for subprime loans (of all grades) increased from less than five percent in early 2000 to more than eight percent by late 2001. Prime loan delinquencies were almost constant over this period, at around 1 percent, and FHA delinquencies rose much more slowly from about 3.5 to about 4.5 percent.

Because subprime lending—especially the higher risk segments known as B, C or D lending—is highly concentrated in certain types of neighborhoods, these neighborhoods bear a disproportionate share of subprime foreclosures. Moreover, many of the subprime lenders exhibiting the highest foreclosure rates are concentrated in certain areas, so that these areas are hit especially hard. The nature of residential sorting and the experience of the FHA program suggest that a lender may have a substantial but not unreasonable foreclosure rate nationally and still have a foreclosure rate in certain neighborhoods that is exorbitant. Lenders may be able to tolerate foreclosure rates of two to five percent nationally and still be successful raising capital. These same lenders may have foreclosure rates of more than ten to fifteen percent in specific communities.

Foreclosures—particularly those leading to abandonment and blight—often have negative spillover effects, or externalities, that can be a key source of market failure. Because the negative social costs of these spatially concentrated foreclosures (abandonment, blight, crime, and lower neighborhood property values) are not captured in market transactions, the high foreclosure numbers can indicate that lending levels will be excessive even from an efficiency perspective. It is important to add that foreclosures in

---

<sup>14</sup> Moreno, A. 1995. *The Cost-Effectiveness of Mortgage Foreclosure Prevention*. Minneapolis: Family Housing Fund.

<sup>15</sup> Simons, R. A., R. G. Quercia, and I. Maric. 1998. "The Value of Residential Construction and Neighborhood Disinvestment in Residential Sales Price." *Journal of Real Estate Research* 15(1-2):147-61.

<sup>16</sup> Phillips-Patrick, Eric Hirschhorn, Jonathon Jones, and John LaRocca. 2000. *What About Subprime Mortgages? Mortgage Market Trends* 4, no. 1 (June). Washington, D.C.: Office of Thrift Supervision Research and Analysis.

<sup>17</sup> Crews Cutts, Amy and Robert A. Van Order. 2003. "On the Economics of Subprime Lending." McLean, VA: Freddie Mac.

struggling, low- or moderate-income and minority neighborhoods may have greater negative impacts than those in middle- and upper-income areas. In the latter case, the foreclosures are less likely to lead to abandoned buildings, blight and crime.

At least five recent studies have identified some relationship between subprime lending and foreclosures at the neighborhood level.<sup>18</sup> In Baltimore, while the subprime share of mortgages in the city was 21 percent in 1998 (presumably higher than in previous years), 45 percent of foreclosure petitions in that year were tied to subprime loans. Subprime foreclosures accounted for 57 percent of all foreclosures in black Baltimore neighborhoods. In Atlanta, a study by Abt and Associates found that foreclosures attributed to subprime lenders accounted for 36 percent of all foreclosures in predominantly minority neighborhoods in 1999, while their share of loan originations was between 26 and 31 percent in the preceding three years. In Essex County, New Jersey, researchers found that the percent of foreclosures attributed to subprime lenders increased from 19 percent in 1995 to 30 percent in 2000, though they also admitted that these figures substantially underestimated the subprime share of foreclosures. By mapping foreclosures they were also able to identify that foreclosures were disproportionately concentrated in predominantly black neighborhoods

These studies generally tend to underestimate the proportion of foreclosures due to subprime originators and overestimate the proportion due to prime originators. Many subprime loans are sold to financial institutions identified by the U.S. Department of Housing and Urban Development as “prime” or are held in trusts at prime lending institutions (usually banks). The reverse does not tend to be the case; subprime lenders do not often buy loans from prime lenders and generally do not have trust capacity. Thus, foreclosures of subprime loans sold to prime lenders or trusts would list only the prime lender who currently holds the loan, not the originating subprime lender.

In the studies of Chicago, the authors were plagued by the same problem, but did obtain pricing data on a portion of the foreclosures. The National Training and Information Center (1999) found that foreclosures on loans with interest rates above comparable Treasury rates plus four percentage points (clearly subprime-priced loans) increased by 500 percent from 1993 to 1998. Many of these foreclosures were concentrated in minority neighborhoods. Collins (2003) found that loans by subprime lenders increased by 32 percent from 1996 to 2001, while foreclosures on loans priced 300 basis points or higher increased by 260 percent over the same period.

### **Establishing a Stronger Measure of the Relationship Between Subprime Lending and Foreclosures**

Subprime loans are expected to entail at least marginally higher risks than prime loans, so somewhat higher foreclosure rates should be expected. The heart of many policy debates regarding subprime and predatory lending, however, is a question of how much additional risk should be tolerated. In order to inform this debate, we need better measures of the impact that subprime loans of various types (home purchase versus refinance, for example) have on neighborhood foreclosure levels. To do this we gathered

---

<sup>18</sup> Collins, Michael. 2003. “Chicago’s Homeownership Preservation Challenge: Foreclosures,” presentation. Washington: Neighborhood Reinvestment Corporation. February; Greunstein, Deborah and Christopher Herbert. 2000. *Analyzing Trends in Subprime Originations and Foreclosures: A Case Study of the Atlanta Metro Area*, Abt Associates, February; National Community Reinvestment Coalition. 2003 *The Broken Credit System: Discrimination and Unequal Access to Affordable Loans by Race and Age*. Washington, D.C.: National Community Reinvestment Coalition; Zimmerman, Ken, Elvin Wyly, and Hilary Botein.. 2002. *Predatory Lending in New Jersey: The Rising Threat to Low-Income Homeowners*. Newark: New Jersey Institute for Social Justice, February.

computerized foreclosure data for the five-county metropolitan Chicago area, geocoded it to the census tract level, and compared it to lending data in the same area.

Before developing some relatively precise measures of the relationship between subprime lending and foreclosures, we first examine broader patterns of foreclosures. From 1995 to 2002, the Chicago area experienced tremendous growth in foreclosure starts. The total number of starts went from 7,433 in 1995 to 25,145 in 2002, an increase of 238 percent. What is particularly troubling about this trend is the disproportionate increase due to conventional, nongovernment-guaranteed loans. Historically, FHA loans, which account for the bulk of government-guaranteed loans, have had substantially higher foreclosure rates than conventional loans and have accounted for a very large and disproportionate share of foreclosures. Of course, as subprime loans (which comprise a portion of conventional loans) increased, more conventional loans foreclosure rates would be expected to increase to some degree. However, the nature of urban foreclosure problems has been fundamentally transformed during the middle-to-late 1990s and into the new century. It is now the conventional mortgage market that accounts for the bulk of foreclosures.

Figure 1 shows that while government guaranteed foreclosures rose significantly between 1995 and 2002, from 3,387 to 6,932, conventional foreclosures skyrocketed from 4,046 to 18,213. Foreclosures of conventional loans increased at a rate (350 percent) more than three times the government-guaranteed rate (105 percent). As Figure 2 shows, the result is that, while conventional loans accounted for only slightly more than half of foreclosures in 1995, they accounted for almost three out of four just seven years later. This rise in conventional loan foreclosures is cannot solely be attributed to increases in originations. In the intervening years, from 1996 to 2001, conventional lending grew by roughly 104 percent while government lending increased by about 55 percent, so relative to government foreclosures, conventional foreclosures increased at a far greater rate than conventional lending.

### **Foreclosures and Neighborhood Racial Composition**

It is well established that subprime lending increased much more in minority than nonminority neighborhoods in the 1990s.<sup>19</sup> It is also well established that mortgage brokers have been implicated in many instances of abusive and irresponsible lending activity. Brokers act as a local intermediary between national lenders and borrowers. The nature of the broker market is such that there are many small brokers serving different geographic areas and many who focus on certain communities. The use of brokers, then, may segment the foreclosure patterns of a specific lender, with higher foreclosure rates resulting in areas served by less responsible or reputable brokers.

Thus, individual lenders may experience large spatial variations in loan performance within a metropolitan area. Moreover, broker-originated loans are twice as likely to be subprime than lender-originated loans.<sup>20</sup> Among older borrowers, brokers are also more likely to lend to nonwhite borrowers. Sixty-two percent of older nonwhite borrowers received loans via brokers, while only 38 percent of older white borrowers did. Brokers are heavily associated with aggressive “push marketing.” In their study of older borrowers, Kim-Sung and Hermanson (2003) found that 56 percent of borrowers with brokered loans reported that contact was initiated by the broker, while other borrowers reported that lenders initiated contact only 24 percent of the time. More than twice as many borrowers using brokers received

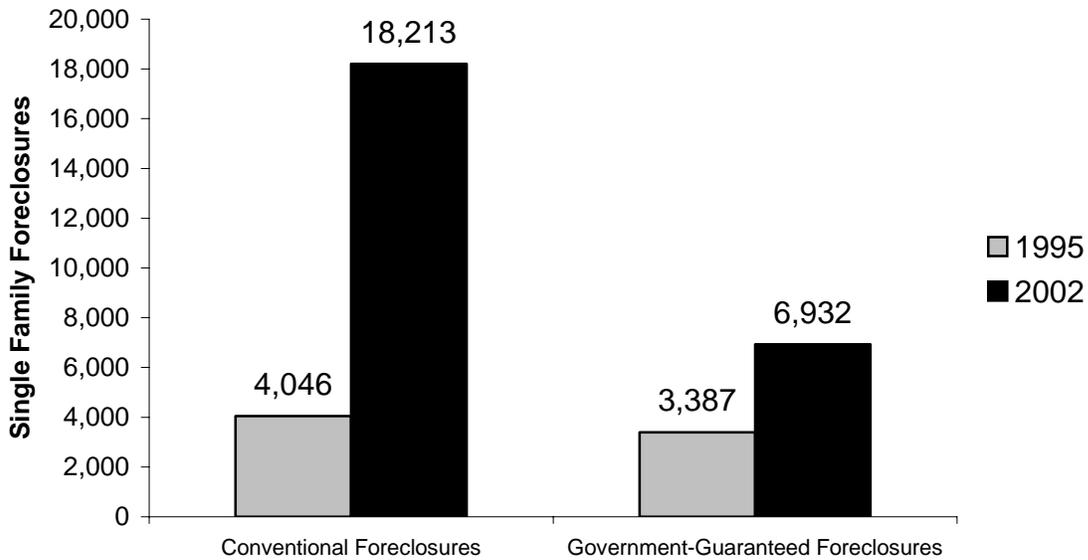
---

<sup>19</sup> Immergluck, Daniel and Marti Wiles. 1999. *Two Steps Back: Predatory Lending, the Dual Mortgage Market, and the Undoing of Community Development*. Chicago: Woodstock Institute.

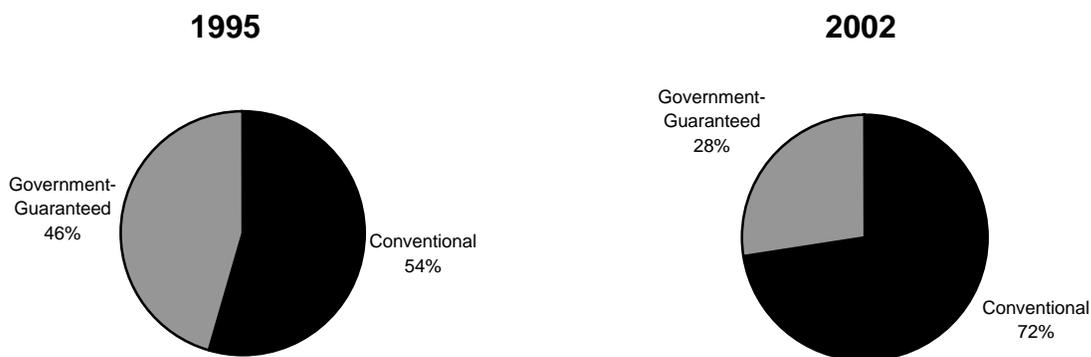
<sup>20</sup> Kim-Sung, Kellie and Sharon Hermanson. 2003. “Experiences of Older Refinance Mortgage Loan Borrowers: Broker- and Lender-Originated Loans.” Washington, D.C.: AARP Public Policy Institute. January.

loans with prepayment penalties (26 percent versus 12 percent), and significantly more brokered loans involved refinancing two or more times over a three year period. Borrowers with brokered loans were generally less satisfied with their loans and were less likely to feel that they received honest information. Brokers are generally regulated only by state regulators, and the degree of such oversight tends to vary from minimal to nonexistent.

**Figure 1. Increases in Foreclosure Starts by Conventional/Government-guaranteed Type in the Chicago Metropolitan Area 1995 –2002**



**Figure 2. Share of Foreclosures by Government/Conventional Type**



Even lenders not using brokers may experience differentials in loan performance across neighborhood space. In particular, if lending policies are not well designed for lower-income borrowers, a lender may see higher foreclosures in lower-income neighborhoods. In addition, if markets function more poorly in particular geographic areas, then borrowers may be paying higher rates than they would otherwise. They might also accept structured or abusive loans at higher rates than in places where markets function better. These patterns can intensify the geographic concentration of foreclosures.

Figure 3 illustrates the large differences in the growth of foreclosures by neighborhood racial and ethnic composition. While conventional foreclosures increased dramatically in all neighborhood types, they increased considerably faster in neighborhoods with higher minority populations. Neighborhoods with minority populations of less than 10 percent in 2000 saw an increase in foreclosures of 215 percent, while neighborhoods with 90 percent or greater minority populations experienced an increase of 544 percent.

**Figure 3. 1995 – 2002 Increases in Conventional Foreclosures by Neighborhood Racial Composition in 2000**

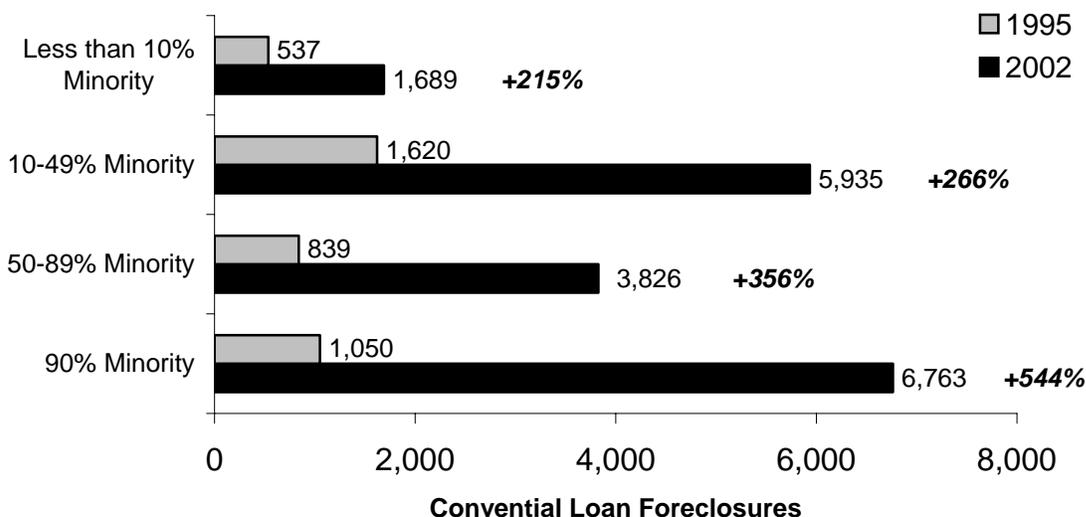


Figure 3 also indicates that neighborhoods with 90 percent or more minority residents in 2000 accounted for 40 percent of the 1995-2002 increase in conventional foreclosures.<sup>21</sup> These same tracts represented only 9.2 percent of the owner-occupied housing units in the region. Tracts with 50 percent or greater minority populations accounted for more than 61 percent of the increase in foreclosures.

### Analyzing the Link between Subprime Lending and Foreclosures

To better understand the relationship between subprime lending and neighborhood foreclosures we developed two multivariate regression models to determine to what extent different variables affected foreclosure. The dependent variable in both models is 2002 foreclosures. The first model controls for loan level features including type of lender (prime or subprime) and owner-occupancy of property (owner occupied or non-owner occupied). The second model adds information on loan purpose (home purchase, home improvement, refinance). For both models we use total loans by tract from 1996 to 2001. Both models also control for change in neighborhood demographic and economic characteristics relating to population, race/ethnic make-up, median family income, unemployment rate, and median property value. The results show that:

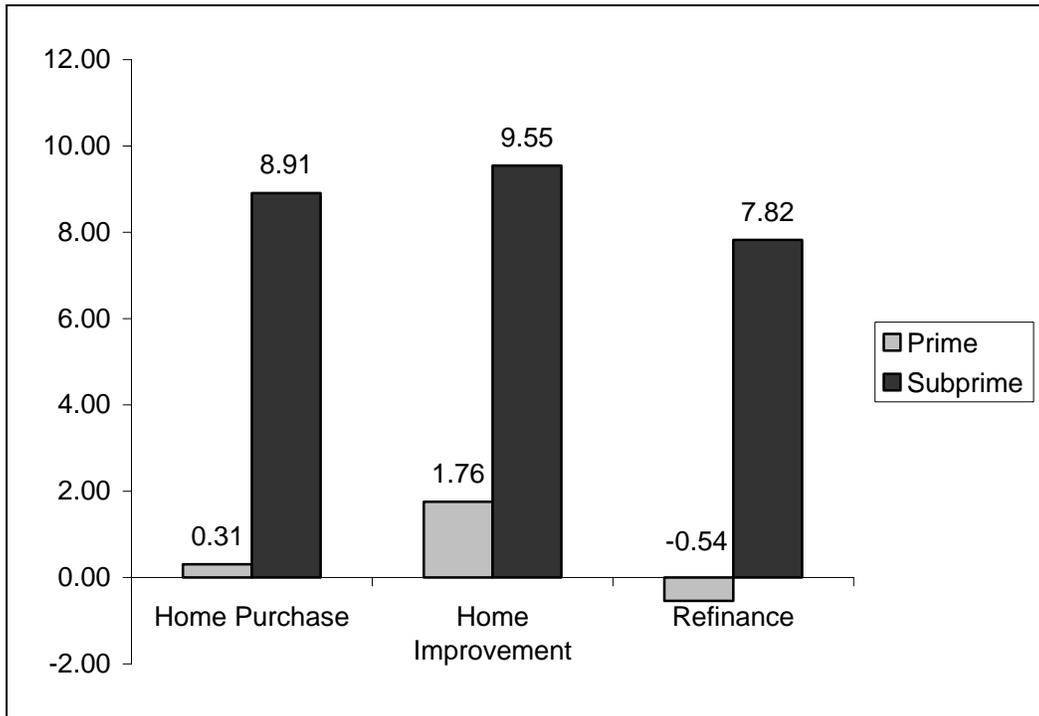
<sup>21</sup> The HMDA data used in this study are reported according to 1990 census tract boundaries. Therefore, it was necessary to obtain 2000 census data recalculated to 1990 tract boundaries for the purposes of matching the data with the 1990 boundaries. This data was procured from PCI Services, Inc., which provides this product for its CRA Wiz software, a program commonly used by financial institutions and bank regulators to analyze HMDA data.

- **Subprime lending has a substantial impact on neighborhood foreclosure levels.** For every 100 additional subprime loans on owner-occupied properties made in a typical neighborhood from 1996 to 2001, there were an additional 9 foreclosure starts in the community in 2002 alone.<sup>22</sup> Nine foreclosure starts in a census tract in one year is a substantial increase. The average tract in the Chicago area had only about 11 foreclosures starts in 2002. Thus, this represents an increase of 76 percent in the foreclosure level.
- **Non-owner-occupied subprime loans, although far fewer in number than those to owner-occupied properties, have an even higher propensity to lead to increased foreclosures.** A tract with just 10 more such loans over the 1996 to 2001 period, other things being equal, would be expected to have more than 2.5 additional foreclosures in 2002.
- **Prime lending has a minimal impact on the neighborhood foreclosure level and, in the case of refinances, prime lending actually reduces the level of expected foreclosures.**
- **The contribution of subprime home purchase loans to neighborhood foreclosures is 28 times that of prime home purchase loans.** While a tract with 100 additional prime home purchase loans from 1996 to 2001 is expected to have only 0.3 additional foreclosures in 2002, a tract with 100 additional subprime home purchase loans is expected to have almost 9 additional foreclosures.
- **In the case of refinance loans, a higher number of owner-occupied prime loans actually leads to *reduced* foreclosure levels.** A tract with 200 more owner-occupied prime refinance loans during the 1996 to 2001 period is expected to have 1 fewer foreclosure in 2002. This finding argues strongly for a substantial substitution effect between prime and subprime refinance loans. That is, as prime loans increase, the potential market for subprime lenders may be diminished, thus crowding out such lenders.
- **Subprime home improvement loans have the largest impact on foreclosures on a per-loan basis.** A tract with 100 more subprime home improvement loans is expected to have an additional 9.5 foreclosures in 2002 while the corresponding effect for purchase loans is 8.9 and for refinance loans it is 7.8. However, because there are so many more subprime refinance loans, they account for a much larger share of foreclosures.

---

<sup>22</sup> The 100 loan figure is a reasonable one for discussion purposes. The average number of subprime loans per tract in the study was 114 over the 1996-2001 period, with a standard deviation of 105 loans.

**Figure 1. Expected 2002 Foreclosures per 100 Loans from 1996 to 2001 by Type of Lender and Purpose of Loan<sup>23</sup>**



## Conclusions

The findings of this study clearly indicate that subprime lending is a dominant driver of the increased and highly concentrated neighborhood foreclosure levels of the late 1990s and through 2002. Responsible subprime lending may indeed bring important benefits to families that have difficulty obtaining credit elsewhere. However, this study shows that, after controlling for neighborhood demographics and economic conditions, subprime loans lead to foreclosures at twenty or more times the rate that prime loans do. This is a heavy social cost. For every 100 subprime loans made in a typical neighborhood from 1996 to 2001, there resulted an additional 9 foreclosures in the community in 2002 alone. Nine foreclosures in a census tract in one year is a substantial increase.

Prime lending, on the other hand, had minimal impact on the foreclosure level and, in the case of refinance lending, prime lending actually reduces the level of foreclosures expected. If anything, this analysis is likely to underestimate the impact of subprime lending on foreclosures in neighborhoods that are particularly vulnerable. Residents of lower income and minority communities are less likely to be able to avoid foreclosure via borrowing from friends and relatives; increasing earnings by having a spouse increase working hours; or tapping into other wealth reserves.

<sup>23</sup> Expected foreclosure values are derived from a regression model explained in detail in the full publication. The above individual values should be interpreted as holding all other variables in the model constant. The model controls for loan level features including type of lender (prime or subprime), purpose of loan (home purchase, home improvement, refinance), owner-occupancy of property (owner occupied or non-owner occupied). It also controls for neighborhood demographic and economic characteristics relating to population, race/ethnic make-up, median family income, unemployment rate, and median property value.

This study has a number of implications for regulatory policy in the arena of home lending. First, it makes a strong case that the magnitude of the effect of subprime lending on neighborhood foreclosures is very large. Given the impact of foreclosures on neighborhood vitality and stability, especially in modest-income neighborhoods where foreclosures more often lead to abandonment and blight, this cost of high-risk lending should be given more weight in policy discussions. This is especially true since much of this cost is borne by entire communities, not just by the lender or borrower.

Foes of increased regulation of the subprime mortgage market often argue that increased regulation will result in higher costs of borrowing for many borrowers and perhaps even reduce credit access for some. However, the social costs involved in substantially higher foreclosures in many struggling neighborhoods might not be easily outweighed by marginally lower borrowing costs spread thinly across a broad set of borrowers. Even if some worthy borrowers are prevented from obtaining credit due to increased regulation, the benefits of reduced foreclosures may justify such action. Moreover, foreclosures are hardly the entire costs of overly risky and irresponsible subprime lending. Financial and emotional stress, excessive charges and fees, and other harms to borrowers must be considered. Certainly, many borrowers benefit from responsible subprime lending. The findings of this study, however, suggest that the negative spillovers occurring in the existing marketplace are substantial and that such spillovers must be more clearly considered in policy-making.